

### ABSTRACT

An alternator comprising an inner housing, an outer housing mounted over the inner housing and a plurality of o-rings positioned between the inner housing and the outer housing thereby creating a sealed flow chamber having a first plenum, an axial jacket, a second plenum, a first passageway interconnecting the first plenum and the axial jacket, a second passageway interconnecting the axial jacket and the second plenum, an inlet extending from the first plenum, and an outlet extending from the second plenum. The first and second plenums are disk shaped cavities extending diametrically across the alternator, and the axial jacket is an annular jacket extending around the alternator. The first passageway is located diametrically across from the inlet and the second passageway is located diametrically across from the first passageway. The outlet is located diametrically across from the second passageway.